

U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE STATEMENT	ATTY. DOCKET NO. 265280-68002	SERIAL No. 10/058,495
	APPLICANT King, et al.	
	FILING DATE January 28, 2002	GROUP Unknown

		Document Number	Date	Name of Applicant	Class	Subclass	Filing Date if Appropriate
AL	AA	3,297,641	1/1967	Werber et al.			1/1964
	AB	3,352,818	11/1967	Meyer et al.			1/1965
	AC	3,646,155	2/29/1972	Scott, H.G.	260	827	12/18/69
	AD	3,671,477	6/1972	Nesbitt	524	424	12/16/70
	AE	3,758,273	9/1973	Johnston et al.			4/1971
	AF	3,944,536	3/1976	Lupton et al.			6/1973
	AG	4,138,382	2/06/1979	Polmanteer	523	113	5/1978
	AH	4,390,666	6/1983	Moriguchi	525	194	7/30/1982
	AI	4,483,333	11/20/1984	Wartman	128	90	6/1/1982
	AJ	4,518,552	5/21/1985	Matsuo et al.	264, 524	126,104, 122,236, 323, 587	11/9/1983
AK	AK	4,539,374	9/3/1985	Fenton et al.	525	240	3/21/1984

FOREIGN PATENT DOCUMENTS

		Document Number	Date	Country	Class	Subclass	Translation Yes No
AL	AL	WO 95/21212	8/10/1995	PCT			X
	AM	WO 96/09330	3/28/1996	PCT			X
	AN	JP-A-62 243 634	1/24/1987	Japan (Abstract in English)			
	AO	JP-A-59 168 050	9/21/1984	Japan (Abstract in English - 2 pages)			
AP	AP	JP-A-04 185651	7/2/1992	Japan (Abstract in English)			

OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)

AR	AR	"Poly Two Carbon-Polyethylene Composite-A Carbon Fiber Reinforced Molded Ultra-High Molecular Weight Polyethylene", Technical Report, Zimmer (a Bristol-Myers Squibb Company), Warsaw (1977)					
	AS	Atkinson, J.R. et al., "Silane cross-linked polyethylene for prosthetic applications. Part I: Certain physical and mechanical properties related to the nature of the material", Biomaterials, 4:267 (1983)					
	AT	Atkinson, J.R. et al., "Silane cross-linked polyethylene for prosthetic applications. Part II. Creep and wear behavior and a preliminary moulding test", Biomaterials, 5:326 (1984)					
	AU	Bartel, D.L. et al., "The Effect of Conformity, Thickness, and Material on Stresses In Ultra-High Molecular Weight Components for Total Hip Replacement", J. Bone & Joint Surgery, 68-A(7):1041 (1986)					
	AV	Bhateja, S.K., "Radiation-Induced Crystallinity Changes In Pressure-Crystallized Ultra-High Molecular Weight Polyethylene", J. Macromol. Sci. Phys., B22(1): 159 (1983)					
	AW	Bhateja, S.K. et al., "Radiation-Induced Crystallinity Changes in Linear Polyethylene", J. Polym. Sci. Polym. Phys. Ed., 21: 523 (1983)					
	AX	Bhateja, S.K. et al., "Radiation-Induced Crystallinity Changes in Polyethylene Blends", J. Mater. Sci., 20: 2839 (1985)					
	AY	Birkinshaw, C. et al., "The Melting Behavior of Irradiated Polymers", Thermochimica Acta, 117: 365 (1987)					
AM	AZ	Bloebaum, R.D. et al., "Investigation of Early Surface Delamination Observed in Retrieved Heat-Pressed Tibial Inserts", Clin. Orthop., 269: 120 (1991)					

Examiner <i>Anuradhe Lamana</i>	Date Considered <i>12/27/03</i>
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Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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AR	BA	4,582,656	04/15/1986	Hoffmann			
	BB	4,655,769	4/1987	Zachariades			12/1985
	BC	4,668,527	5/26/1987	Fujita et al.	427	35	9/1985
	BD	4,743,493	5/10/1988	Sioshansi et al.			10/6/1986
	BE	4,747,990	5/1988	Gaussens et al.			3/1986
	BF	4,816,517	3/1989	Wilkus	524	520	5/23/1985
	BG	4,876,049	10/24/1989	Aoyama et al.			11/19/86
	BH	4,888,369	12/19/1989	Moore, Jr.	524, 522 523, 252	100,102, 120, 75, 76, 79, 105,401, 403	4/24/1987
	BI	4,902,460	2/1990	Yagi	264	83	
	BJ	4,944,974	7/1990	Zachariades			10/1988
AR	BK	5,024,670	6/1991	Smith et al.			10/1989

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		Document Number	Date	Country	Class	Subclass	Translation Yes No
AR	BL	BE-A-1001574	12/5/1989	Belgium			X
	BM	WO 93/10953	11/27/1991	E.I. DuPont			
	BN	EP 0722,973A1	07/24/1996	EPO			
	BO	EP 0729,981A1	09/04/1996	EPO			
AR	BP	WO 97/29793	08/21/1997	PCT			

OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)

AR	BR	Bremmer, T. et al., "Peroxide Modification of Linear Low-Density Polyethylene: A Comparison of Dialkyl Peroxides", J. Appl. Polym. Sci., 49 : 785 (1993)
	BS	Brown, K. J. et al., "The Wear of Ultra-High Molecular Weight Polyethylene with Reference to Its Use in Prostheses", Plastics in Medicine & Surgery Plastics & Rubber Institute, London, 2.1 (1975)
	BT	Chen, C.J. et al., "Radiation-Induced crosslinking: II. Effect on the crystalline and amorphous densities of polyethylene", Coll. & Polym. Sci., 269: 469 (1991)
	BU	Chen, Y.L. et al., "Photocrosslinking of Polyethylene I. Photoinitiators, Crosslinking Agent, and Reaction Kinetics", J. Polym. Sci., Part A: Polym. Chem. 27: 4051 (1989)
	BV	Chen, Y.L. et al., "Photocrosslinking of Polyethylene. II. Properties of Photocrosslinked Polyethylene", J. Polym. Sci., Part A; Polym. Chem., 27: 4077 (1989)
	BW	Connelly, G.M. et al., "Fatigue Crack Propagation Behavior of Ultrahigh Molecular Weight Polyethylene", J. Orthop. Res., 2: 119 (1984)
	BX	deBoer, A.P. et al., "Polyethylene Networks Crosslinked in Solution: Preparation, Elastic Behavior, and Oriented Crystallization. I. Crosslinking In Solution", J. Polym. Sci., Polym. Phys. Ed., 14: 187 (1976)
	BY	deBoer, J. et al., "Crosslinking of Ultra-High Molecular Weight Polyethylene in the Melt by Means of 2,5-dimethyl-2,5-bis (tert-butyldioxy)-3-hexyne", Makromol. Chem. Rapid Commun., 2: 749 (1981)
AR	BZ	deBoer, J. et al., "Crosslinking of Ultra-High Molecular Weight Polyethylene in the Melt by Means of 2,5-dimethyl-2,5-bis (tert-butyldioxy)-3-hexyne: 2. Crystallization Behavior and Mechanical Properties", Polymer, 23: 1944 (1982)

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		Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate
AL	CA	5,037,928	8/1991	Li et al.			3/1990
	CB	5,130,376	7/1992	Shih	525	240	
	CC	5,133,757	7/28/1992	Sioshansi et al.	623	18	7/31/1990
	CD	5,160,464	11/1992	Ward et al.			3/1988
	CE	5,160,472	11/1992	Zachariades			2/1990
	CF	5,180,394	1/19/1993	Davidson	623	18	11/91
	CG	5,192,323	3/09/1993	Shetty et al.	623	16	3/1993
	CH	5,210,130	5/11/1993	Howard, Jr.			
	CI	5,236,563	8/17/1993	Loh	204,606, 424	165,230, 231,426	6/18/1990
	CJ	5,356,998	10/18/1994	Hobes			8/9/1993
	CK	5,407,623	4/1995	Zachariades et al.			1/1/1994

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		Document Number	Date	Country	Class	Subclass	Translation No
AK	CL	0 169 259	7/25/1984	EPO-Abstract			X
	CM	09 12 22 22	5/5/1997	Japan - Abstract			
	CN	0 373 800 A1	6/1990	EPO			
	CO	58-157830A	9/1983	Japan			X
	CP	0 737481A1	10/1996	EPO			

OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)

AK	CR	deBoer, J. et al., "Crosslinking of Ultra-High Molecular Weight Polyethylene in the Oriented State with Dicumylperoxide", Polymer, 25: 513 (1984)
	CS	Dijkstra, D.J. et al., "Cross-linking of ultra-high molecular weight polyethylene in the melt by means of electron beam irradiation", Polymer, 30: 866 (1989)
	CT	Ding Z.Y. et al., "Model Filled Polymers. VI. Determination of the Crosslink Density of Polymeric Beads by Swelling", J. Polym. Sci., Part B: Poly. Phys., 29: 1035 (1991)
	CU	Eyerer, P. et al., "Property changes of UHMW polyethylene hip cup endoprostheses during implantation", J. Biomed. Materials Res., 18: 1137 (1984)
	CV	Eyerer, P., "Polyethylene", Concise Encyclopedia of Medical and Dental Implant Materials, Pergamon Press, Oxford, 271 (1990)
	CW	Ferris, B.D., "A quantitative study of the tissue reaction and its relationship to debris production from a joint implant", J. Exp. Path., 71: 367 (1990)
	CX	Gielenz G. et al., "Crystalline and supermolecular structures in linear polyethylene irradiated with fast electrons", Colloid & Polymer Sci., 260: 742 (1982)
	CY	Grobbelaar, C.J. et al., "The Radiation improvement of Polyethylene Prosthesis", J. Bone & Joint Surgery, 60-B(3): 370-374 (1978)
	CZ	Goodman, S. et al., "Polyethylene wear in knee arthroplasty", Acta Orthop. Scand., 63(3): 358 (1992)

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AL	DA	5,414,049	5/9/1995	Sun et al.	525	333.7	6/1/1993
	DB	5,449,745	9/12/1995	Sun et al.	528	483	10/7/1994
	DC	5,466,530	11/1995	England et al.			1/1993
	DD	5,478,906	12/1995	Howard, Jr.			5/1994
	DE	5,480,683	1/1996	Chabrol et al.			12/1993
	DF	5,495,319	4/1996	DeNicola	526	352	
	DG	5,515,590	5/1996	Pienkowski			7/1994
	DH	5,543,471	8/6/1996	Sun et al.			
	DI	5,549,698	8/1996	Averill et al.			10/1994
	DJ	5,549,700	8/1996	Graham et al.			12/1994
AL	DK	5,577,368	11/26/1996	Hamilton et al.			4/3/1995

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		Document Number	Date	Country	Class	Subclass	Translation Yes
AL	DL	04-198242	7/1992	Japan			
	DM	WO 98/14223	4/9/1998	PCT			
	DN	WO 98/01085	1/15/1998	PCT			
	DO	EP 0 963 824 A2	12/15/1999	EPO			
AL	DP	EP 0 963 824 A3	09/12/2001	EPO			

OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)

AL	DR	Grood, E.S. et al., "Analysis of retrieved implants: Crystallinity changes in ultrahigh molecular weight polyethylene", J. Biomedical Materials Res., 16: 399 (1982)
	DS	Huang, D.D. et al., "Cyclic Fatigue Behaviors of UHMWPE and Enhanced UHMWPE", Trans. 38 th Ann. Mtg., Orthop. Res. Soc., 403 (1992)
	DT	Kamel, I. et al., "A Model for Radiation-Induced Changes in Ultrahigh-Molecular-Weight-Polyethylene", J. Polym. Sci., Polym. Phys. Ed., 23:2407 (1985)
	DU	Kampouris, E.M. et al., "Benzyl Peroxide as a Crosslinking Agent for Polyethylene", J. Appl. Polym. Sci., 34: 1209 (1987)
	DV	Kao, Y.H., "Crystallinity in chemically crosslinked low density polyethylenes: I Structural and fusion studies", Polymer, 27: 1669 (1986)
	DW	Katq, K. et al., "Structural Changes and Melting Behavior of γ -Irradiated Polyethylene", Japanese J. Appl. Phys., 20: 691 (1981)
	DX	Kunert, K.A. et al., "Structural investigation of chemically crosslinked low density polyethylene", Polymer, 22: 1355 (1981)
	DY	Kurth, M. et al., "Effects of Radiation Sterilization on UHMW-Polyethylene", Trans. Third World Biomaterials Congress, 589 (1988)
AL	DZ	Landy, M.M. et al., "Wear of Ultra-high-molecular-weight Polyethylene Components of 90 Retrieved Knee Prostheses", J. Arthroplasty, Supplement, 3: S73 (1988)

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AK	EA	5,593,719	01/14/1997	Deamaley et al.	427	2.26	3/1994
	EB	5,609,638	03/11/1997	Price et al.	623	18	11/94
	EC	5,645,882	07/08/1997	Llanos	427	2.24	11/95
	ED	5,650,485	07/22/1997	Sun et al.			
	EE	5,674,293	10/7/1997	Armini et al.	623	16	1/1996
	EF	5,702,448	12/30/1997	Buechel et al.	623	16	7/1995
	EG	5,702,456	12/30/1997	Pienkowski	623	18	3/1996
	EH	5,728,748	03/17/1998	Sun et al.			
	EI	5,876,453	03/02/1999	Beaty	623	16	2/1996
	EJ	5,879,388	03/09/1999	Pienkowski et al.	623	18	11/97
AK	EK	5,879,400	03/09/1999	Merrill et al.	623	22	2/1996

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	EL						
	EM						
	EN						
	EO						
	EP						

OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)

AK	ER	Lem, K. et al., "Rheological Properties of Polyethylenes Modified with Dicumyl Peroxide", J. Appl. Polym. Sci., 27: 1367 (1982)
	ES	Li, S. et al., "Characterization and Description of an Enhanced Ultra High Molecular Weight Polyethylene for Orthopaedic Bearing Surfaces", Trans. 16 th Ann. Soc. Biomaterials Meeting, Charleston, SC, 190 (1990)
	ET	Manley, T.R. et al., "The effects of varying peroxide concentration in crosslinked linear polyethylene", Polymer, 12:176 (1971)
	EU	McKellop, H. et al., "Friction, Lubrication and Wear of Polyethylene Metal and Polyethylene/Ceramic Hip Prostheses on a Joint Simulator", Fourth World Biomaterials Congress, Berlin, April, 118 (1992)
	EV	Minkova, L., "DSC of γ -irradiated ultra-high molecular weight polyethylene and high density polyethylene of normal molecular weight", Colloid & Polymer Sci., 266: 6 (1988)
	EW	Minkova, L. et al., "Blends of normal high density and ultra-high molecular weight polyethylene, γ -irradiated at a low dose", Colloid & Polymer Sci., 268: 1018 (1990)
	EX	Nagy, E.V. et al., "A Fourier transform infrared technique for the evaluation of polyethylene orthopaedic bearing materials", Trans. 16 th Ann. Soc. For Biomaterials Meeting, Charleston, SC 109 (1990)
	EY	Narkis, M. et al., "Structure and Tensile Behavior of Irradiation-and Peroxide-Crosslinked Polyethylene", J. Macromol. Sci.-Phys., B26(1): 37 (1987)
AK	EZ	Nusbaum, H. J. et al., "The Effects of Radiation Sterilization on the Properties of Ultrahigh Molecular Weight Polyethylene", J. Biomed. Materials Res., 13: 557 (1979)

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AK	FA	5,879,407	03/09/1999	Waggener	623	22	7/97
	FB	6,017,975	01/25/2000	Saum et al.			8/15/1997
	FC	6,143,232	11/7/2000	Rohr			7/29/1999
	FD	6,168,626	01/02/2001	Hyon et al.			
	FE	2,948,666	11/21/1956	E. J. Lawton			
	FF	4,055,862	11/01/1977	Farling			
	FG	4,281,420	11/04/1981	Raab			
	FH	4,366,618	01/04/1983	Lakes			
	FI	4,586,995	05/06/1986	Randall et al.			
	FJ	5,014,494	05/14/1991	George			
AK	FK	5,137,688	08/11/1992	DeRudder			

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	FL						
	FM						
	FN						
	FO						
	FP						

OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)

AK	FR	Oonishi, H. et al., "Improvement of Polyethylene by Irradiation in Artificial Joints", Radiat. Phys. Chem., 39: 495 (1992)
	FS	Oonishi, H. et al., "In Vivo and In Vitro Wear Behavior on Weightbearing Surfaces of Polyethylene Sockets Improved by Irradiation in Total Hip Prostheses", Surface Modification Technologies V, 101-115 (1992), Sudarsahn T.S. et al., ed. The Institute of Materials
	FT	Painter, P.C., et al., "The Theory of Vibrational Spectroscopy and its Application to Polymeric Materials", Ed. John Wiley & Sons, New York, U.S.A., (1982)
	FU	Paul, J. P., "Forces Transmitted by Joints in the Human Body", Proc. Instn. Mech. Engrs. 181, Part 3J, Paper 8 (1966)
	FV	Qu, B.J. et al., "Photocross-linking of Low Density Polyethylene. I Kinetics and Reaction Parameters", J. Appl. Polym. Sci., 48: 701 (1993)
	FW	Qu, B.J. et al., "Photocross-linking of Low Density Polyethylene. II Structure and Morphology", J. Appl. Polym. Sci., 48: 711 (1993)
	FX	Rimnac, C.M. et al., "Chemical and Mechanical Degradation of UHMWPE: Report of the Development of an In vitro Test", J. Appl. Biomaterials, 5:17 (1994)
	FY	Rimnac, C.M. et al., "Observations of Surface Damage and Degradation on Retrieved PCA Knee Implants", Trans. 38 th Ann. Orthopaedic Res. Society, Washington, D.C., 330 (1992)
AK	FZ	Rimnac, C.M. et al., "Post-Irradiation Aging of Ultra-High Molecular Weight Polyethylene", J. Bone & Joint Surgery, 76-A(7): 1052 (1994)

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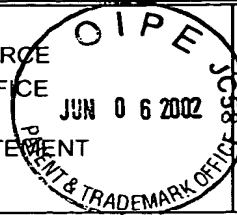
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ATTY. DOCKET NO.

265280-68002

SERIAL No.

10/058,495

APPLICANT

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GROUP

Unknown

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AR	GA	5,153,039	10/06/1982	Porter et al.			
	GB	5,200,439	04/06/1993	Asanuma			
	GC	5,439,949	08/08/1995	Lucas et al.			
	GD	5,709,020	01/20/1998	Pienkowski et al.			
	GE	5,753,182	05/19/1998	Higgins			
	GF	6,228,900	05/08/2001	Shen et al.			
	GG	6,087,553	07/11/2001	Cohen et al.			
	GH	5,645,594	07/08/1997	Devanathan et al.			
	GI	6,245,276	06/12/2001	McNulty et al.			
	GJ	5,607,518	03/04/1997	Hoffman et al.			
AK	GK	6,316,158	11/13/2001	Saum et al.			

FOREIGN PATENT DOCUMENTS

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	GL						
	GM						
	GN						
	GO						
	GP						

OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)

AR	GR	Roe, R. et al., "Effect of radiation sterilization and aging on ultrahigh molecular weight polyethylene", J. Biomed. Mat. Res., 15: 209 (1981)
	GS	Rose, R.M. et al., "On the True Wear Rate of Ultra-High Molecular Weight Polyethylene in the Total Hip Prosthesis", J. Bone & Joint Surgery, 62A(4): 537(1980)
	GT	Rose, R.M. et al., "Exploratory Investigations in the Structure Dependence of the Wear Resistance of Polyethylene", Wear, 77:89 (1982)
	GU	Rostoker, W. et al., "The Appearances of Wear on Polyethylene—A Comparison of in vivo and in vitro Wear Surfaces", J. Biomed. Materials Res., 12:317 (1978)
	GV	Seedhom, B.B. et al., "Wear of Solid Phase Formed High Density Polyethylene in Relation to the Life of Artificial Hips and Knees", Wear, 24: 35 (1973)
	GW	Shen, C. et al., "The Friction and Wear Behavior of Irradiated Very High Molecular Weight Polyethylene", Wear, 30:349 (1974)
	GX	Shinde, A. et al., "Irradiation of Ultrahigh-Molecular-Weight Polyethylene", J. Polym. Sci., Polym. Phys. Ed., 23: 1681 (1985)
	GY	Spruiell, J.E. et al., "Methods of Experimental Physics", L. Marton & C. Marton, Eds., Vol 16, Part B Academic Press, New York (1980)
AK	GZ	Streicher, R.M., "Ionizing irradiation for sterilization and modification of high molecular weight polyethylenes" Plastics & Rubber Processing & Applications, 10: 221 (1988)

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HA						
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	Document Number	Date	Country	Class	Subclass	Translation Yes No
HL						
HM						
HN						
HO						
HP						

OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)

AK	HR	Streicher, R.M., "Investigation on Sterilization and Modification of High Molecular Weight Polyethylenes by Ionizing Irradiation", Beta-gamma, 1/89:34-43
	HS	Swanson, S.A.V. et al., "Chapter 3, Friction, Lubrication and Wear", The Scientific Basis of Joint Replacement, Pittman Medical Publishing Co., Ltd. (1977)
	HT	Wang, X. et al., "Melting of Ultrahigh Molecular Weight Polyethylene", J. App. Polymer Sci., 34:593 (1987)
	HU	Wright, T.M. et al., "The effect of carbon fiber reinforcement on contact area, contact pressure, and time-dependent deformation in polyethylene tibial components", J. Biomed. Materials Res., 15:719 (1981)
	HV	Zachariades, A.E., "A New Class of UHMWPE Orthopaedic Prosthetic Devices with Enhanced Mechanical Properties", Trans. Fourth World Biomaterials Congress, Berlin 623 (1992)
	HW	Zhao, Y. et al., "Effect of Irradiation on Crystallinity and Mechanical Properties of Ultrahigh Molecular Weight Polyethylene", J. Appl. Polym. Sci., 50:1797 (1993)
	HX	"News You Can Use", Vol. II, No. 2 (May 1996)
	HY	"For the Tough Jobs: 1900 UHMW Polymer", Himont, Inc. (1988)
HL	HZ	"Abrasion-Resistant 1900 UHMW Polymer", Hercules, Inc. (1979)

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U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE STATEMENT	ATTY. DOCKET NO. 265280-68002	SERIAL No. 10/058,495
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	IL						
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OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)

AR	IR	"Technical Information: 1900 Ultrahigh Molecular Weight Polymer, General Information and Applications", Bulletin JPE-101A, Hercules, U.S.A., Inc., (1989)
	IS	"Technical Information: 1900 Ultrahigh Molecular Weight Polymer, Nuclear Radiation Effects", Bulletin HPE-111, Himont U.S.A., Inc. (1985)
	IT	"Technical Information: 1900 Ultrahigh Molecular Weight Polymer, Effect of Polymer Modification", Bulletin HPE-116, Himont U.S.A., Inc. (1987)
	IU	"Ultra-High Molecular Weight Polyethylene as Biomaterial In Orthopaedic Surgery", Hogrefe & Huber Publishers
	IV	Appleby, R.W. et al., "Post-gamma irradiation cross-linking of polyethylene tape by acetylene treatment", J. Material Sci., 29: 227-231 (1994)
	IW	Higgins, J.C. et al., "Evaluation of Free Radical Reduction Treatments for UHMWPE", Proceedings of the 42 nd Annual Mtg., Orthopaedic Res. Soc., Feb. 19-22:485(1996)
	IX	Jasty, M. et al., "Marked Improvement in the Wear Resistance of a New Form of UHMPWE in a Physiologic Hip Simulator", Trans. 43 rd Ann. Mtg., Orthopaedic Research Soc., San Francisco, CA, Feb. 9-13:785(1997)
	IY	Jasty, M. et al., "Marked Improvement in the Wear Resistance of a New Form of UHMPWE in a Physiologic Hip Simulator", Trans. Soc. Biomaterials, Vol. XX, p 71, 23 rd Ann. Mtg. Soc. for Biomaterials. New Orleans, Louisiana, U.S.A., Apr. 30-May 4:157 (1997)
AR	IZ	Streicher, "Influence of Ionizing Irradiation in Air and Nitrogen for Sterilization of Surgical Grade Polyethylene for Implants, Radiat. Phys. Chem., Vol. 31, Nos. 4-6: 693-698 (1988)

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AR	KR	Atkinson, J. et al., "The nature of silane cross-linked HDPE is discussed. Creep and wear tests indicate its potential as a possible replacement for high molecular weight polyethylene in prostheses", Polymers in Medicine and Surgery, Conf. Held by Plastics and Rubber Institute and Biological Engineering Soc., UK. Sep, P4/1-P4/9 (1986)
	KS	Jones, W. et al., "Effect of γ Irradiation on the Friction and Wear of Ultrahigh Molecular Weight Polyethylene, Wear 70: 77-92 (1981)
	KT	Gent, A. et al., "Elastic Behavior, Birefringence, and Swelling of Amorphous Polyethylene Networks", J. Polymer Sci. 5: 47-60 (1967)
	KU	Zoepfl, F. et al., "Differential Scanning Calorimetry Studies of Irradiated Polyethylene: I. Melting Temperatures and Fusion Endotherms", J. Polymer Sci. Polym. Chem. Ed., 22: 2017-2032 (1984)
	KV	Zoepfl, F. et al., "Differential Scanning Calorimetry Studies of Irradiated Polyethylene: II. The Effect of Oxygen", J. Polymer Sci. Polym. Chem. Ed., 22: 2032-2045 (1984)
	KW	Mandelkern, L. et al., "Fusion of Polymer Networks Formed from Linear Polyethylene: Effect of Intermolecular Order", contribution from the General Electric Research Laboratory and from the Polymer Structure Section, National Bureau of Standards 82: 46-53 (1960)
	KX	Muratoglu, O.K. et al., "A Comparison of 5 Different Types of Highly Crosslinked UHMWPEs: Physical Properties and Wear Behavior", 45 th Annual Meeting, Orthopaedic Research Society, Anaheim, CA, February 1-4, 77 (1999)
	KY	Muratoglu, O.K. et al., "A Novel Method of Crosslinking UHMWPE to Improve Wear With Little or No Sacrifice on Mechanical Properties", 45 th Annual Meeting, Orthopaedic Research Society, Anaheim, CA, February 1-4, 829 (1999)
✓ AR	KZ	Muratoglu, O.K. et al., "Electron Beam Cross Linking of UHMWPE At Room Remperature, A Candidate Bearing Material for Total Joint Arthroplasty", 23rd Annual Meeting of the Society for Biomaterials, New Orleans, Louisiana, April 30-May 4, 74 (1997)

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ARC	LR	Matsubara, K et al., "The Wear Properties of High-Density Polyethylene Irradiated by Gamma Rays", Wear 10: 214 (1967)
	LS	McKellop, H. et al., "Increased Wear of UHMW Polyethylene After Gamma Radiation Sterilization", Trans. 26 th Ann. ORS, Atlanta, Georgia, February 5-7 (1980)
	LT	McKellop, H., "The Effect of Radiation and Ethylene Oxide Sterilization on the Wear of UHMW Polyethylene", 7 th European Conference on Biomaterials, Sept. 8-11, (1987)
	LU	Shen, F-S. et al., "Irradiation of Chemically Crosslinked Ultrahigh Molecular Weight Polyethylene", J. Polymer Sci.: Part B: Polymer Phys. 34: 1063-1077 (1996)
	LV	Oka, M. et al., "Wear-Resistant Properties of Newly Improved UHMWPE", Trans. Fifth World Biomaterials Congress, Toronto, Canada 520, (May 29-June 2, 1996)
	LW	Bellare, A. et al., "Deformation, Morphology and Wear Behavior of Polyethylene", Trans. 23 rd Ann. Mtg., Soc. Biomaterials, New Orleans, Louisiana, 75 (Apr. 30-May 4, 1997)
	LX	Clarke, I.C. et al., "Simulator Wear Study of High-Dose Gamma-Irradiated UHMWPE Cups", Trans. 23 rd Ann. Mtg., Soc. Biomaterials, New Orleans, LA, 71, (Apr. 30-May 4, 1997)
	LY	Taylor, G. et al., "Stability of N ₂ Packaged Gamma Irradiated UHMWPE", Trans. 23 rd Ann. Mtg., Soc. Biomaterials, New Orleans, LA, 421, (Apr. 30-May 4, 1997)
ARC	LZ	Taylor, G. et al., "Stability of N ₂ Packaged Gamma Irradiated UHMWPE", Trans. 43 rd Ann. Mtg., Orthopaedic Res. Soc., San Francisco, California, 776 (Feb. 9-13, 1997)

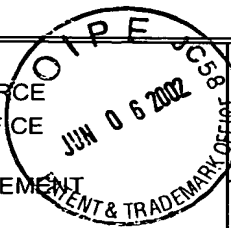
Examiner	<i>Amrutha Ramana</i>	Date Considered	12/27/03
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ARC	MR	McKellop, H. et al., "The Effect of Sterilization Method, Calcium Stearate and Molecular Weight on Wear of UHMWPE Acetabular Cups", Trans. 23 rd Ann. Mtg., Soc. Biomaterials, New Orleans, LA, 43 (Apr. 30-May 4, 1997)
	MS	McKellop, H. et al., "Effect of Sterilization Method on the Wear Rate of UHMW Polyethylene Acetabular Cups in a Hip Simulator", Trans. 43 rd Ann. Mtg., Orthopaedic Res. Soc. San Francisco, CA, 7, 94-16 Feb. 9-13 (1997)
	MT	McKellop, H. et al., "Wear of UHMWPE Acetabular Cups After Gamma Sterilization in Nitrogen, Thermal Stabilization and Artificial Aging", Trans. 23 rd Ann. Mtg., Soc. Biomaterials, New Orleans, LA, Apr. 30-May 4, 45 (1997)
	MU	Wang, A. et al., "Effect of Radiation Dosage on the Wear of Stabilized UHMWPE Evaluated by Hip and Knee Joint Simulators", Trans. 23 rd Ann. Mtg., Soc. Biomaterials, New Orleans, LA, 394 (Apr. 30-May 4, 1997)
	MV	Wang, A. et al., "Wear Mechanisms and Wear Testing of Ultra-High Molecular Weight Polyethylene in Total Joint Replacements", Hand-Out for Polyethylene Wear in Orthopaedic Implants Workshop, Trans. 23 rd Ann. Mtg., Soc. Biomaterials, New Orleans, LA (Apr. 30-May 4, 1997)
	MW	Yu, Y.J. et al., "Oxidation of UHMWPE Acetabular Cups After Sterilization and Wear Testing in a Hip Joint Simulator", Trans. 43 rd Ann. Mtg., Orthopaedic Res. Soc. San Francisco, CA, 778 (Feb. 9-13, 1997)
	MX	Roe, R. et al., "Effect of Radiation Sterilization and Aging on Ultrahigh Molecular Weight Polyethylene", Journal of Biomedical Materials Research, 15:209-230 (1981)
	MY	Li, S. et al., "Chemical Degradation of Polyethylene in Hip and Knee Replacements", 38 th Ann. Mtg., Orthopaedic Research Society, Washington, D.C., 41, (Feb. 7-20, 1992)
ARC	MZ	Kurtz, S.M. et al., "Post-Irradiation Aging and The Stresses in UHMWPE Components for Total Joint Replacement", 40 th Ann. Mtg., Orthopaedic Research Society, New Orleans, LA, 584, (Feb. 21-24, 1994)

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AK	NR	Lancaster et al., "Friction and Wear", in Jenkins (ed): Polymer Science, 959, 1045, North Holland Publishing Company (1972)
	NS	McKellop, H. et al., "Accelerated Aging of Irradiated UHMW Polyethylene for Wear Evaluations", 42 nd Annual Meeting, Orthopaedic Research Society, Atlanta, Georgia, 483, (Feb. 19-22, 1996)
	NT	Blunn, G.W. et al., "The Effect of Oxidation on the Wear of Untreated and Stabilized UHMWPE", 42 nd Annual Meeting, Orthopaedic Research Society, Atlanta, Georgia, 482, (Feb. 19-22, 1996)
	NU	"Duration TM Stabilized UHMWPE: an UHMWPE with Superior Wear and Oxidation Resistance; Technical Development and Scientific Evaluation", (Cover sheet and reference page)
	NV	Sun, D.C. et al., "The Origin of the White Band Observed in Direct Compression Molded UHMWPE Inserts", 20 th Annual Meeting Society for Biomaterials, 121 (April 5-9, 1994)
	NW	Sun, D.C. et al., "On the Origins of a Subsurface Oxidation Maximum and its Relationship to the Performance of UHMWPE Implants", 21 st Annual Meeting, Society for Biochemicals, San Francisco, CA, 362: (March 18-22, 1995)
	NX	Premnath, V. et al., "Melt Irradiated UHMWPE for Total Hip Replacement: Synthesis & Properties", 43 rd Annual Meeting, Orthopedic Res. Soc., San Francisco, CA, 91-16, (February 9-13, 1997)
	NY	Muratoglu, O.K. et al., "The Effect of Temperature on Radiation Crosslinking of UHMWPE for Use in Total Hip Arthroplasty", 46 th Annual Meeting, Orthopaedic Res. Soc., Orlando, FL, 0547 (March 12-15, 2000)
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AR	OR	A.F. Booth, "Industrial Sterilization Technologies: New and Old Trends Shape Manufacturer Choices", Medical Device & Diagnostic Industry, Pages 64-72, February (1995).
	OS	B. Hinsch, "Sterilization Methods for Implants Made of UHMWPE", in Ultra-High Molecular Weight Polyethylene as Biomaterials in Orthopedic Surgery, Toronto: Hogrefe & Huber Publishers, Pages 63-65, (1991).
	OT	"Irradiation Effects on Polymers", edited by D.W. Clegg and A.A. Collyer, Elsevier Applied Science, London, (1991).
	OU	"Radiation Effects on Polymers", edited by R. L. Clough and S. W. Shalaby, ACS Symposium Series 475, (1991).
	OV	P. Eyerer, M. Kurth, H. A. McKellop and T. Mittlemeier, "Characterization of UHMWPE hip cups run on joint stimulators", J. Biomedical Materials Research, Vol. 21, pages 275-291, (1987).
	OW	A. Wang, D.C. Sun, C. Stark, J.H. Dumbleton, Wear, pages 181-183:241-249 (1995).
	OX	A. Wang, C. Stark, J.H. Dumbleton, "Role of cyclic plastic deformation in the wear of UHMWPE acetabular cups", Journal of Biomedical Materials Research, Vol. 29, pages 619-626, (1995).
	OY	A. Edidin et al., "Enhancement of multiaxial mechanical behavior by slot drawing of UHMWPE: a candidate biomaterial for total knee arthroplasty," 46 th Annual Mtg., Orthopaedic. Res. Soc., March 12-15, Orlando, FL (2000).
AR	OZ	Watkins et al. "Fractionation of High Density Polyethylene in Propane by Isothermal Pressure Profiling and Isobaric Temperature Profiling" J. Supercritical Fluids, 4:24-31 (1994).

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